



39. Missouri, Cretaceous eggs.
- 40 { Spalding Spgs
- 41 { Stanley & Keefe farms -
Guthrie, Mo.
- 42 Shields onals
- 43 Yeager, S. Dak. & Iowa
- 44 Frankfurt
- 45 Jackson + H. Ann. E. Mo.
- 46 Bonham SW of Frankfurt
- 47 McGinnis, Bowling Green -
- 48 49 Cretaceous eggs
- 50 E of Cincinnati, Cincinnati
- 51 Sugar Creek
- 52 Watson, Louisiana
- 53 54 Auburn
- 55 S. Dak. edge wood
- 56 Cypress
- 57 Wagon track on the top
- 58 } Devonian section
- 59 } Logan to Henderson
- 60 } farms.
61. Coal in Harley Henderson
farm. Bonford Cove
shiel, Guthrie
Spalding Springs.
62. The McFarland
Hudson River shale
Geologic Devonian
Judge Spalding Dev.

1. Lebanon to Morrow
2. Morrow to Lebanon
3. Lebanon to Morrow
4. Morrow, Coniargo
5. Pleasant Plain, Newt Mills
to dent in the road
6. Marathia, Decatur, Heit
7. Heit, Decatur, Ada Run
8. Fairview, Russellville
9. Manchester
10. Carmel
11. Washburn Hill & Slate Hill
12. Stringtown, Point on Rocky Fork
13. Caves W to Beckett & Bear Mill
14. Carmel, Beckett Hill, St. Albans
15. Jannington, North Davidson school
16. Sinking Springs & East
17. East to Byington, Peetles
18. Peetles
19. Peetles
20. SW of Sinking Springs
21. Cedar Chapel, SW of Sinking
Springs
22. Crooked Cr. SW of Sinking Springs
23. W of W end of Sinking Springs
25. Peetles Mill, Bainbridge
26. Bainbridge
27. N of Bainbridge, Leesburg
28. New River, Iron Hill
29. Latham, Pledge Church
30. NW of Hillston
31. W of Hillston, Berryville
32. East of Berryville
33. Berryville to Harwell
- 34 35 Harwell, NE of
36. NE of Harwell, Lilly Hill
37. Hillston, Sam out here
38. Lilly Hill
39. I do not know

Lebanon

1/4 mi N of Symmes
boundary line.

Dinorthis retrorsa is
8 ft above creek, - about
780

Lebanon

From hotel 2 mi E on
Washington road,

where creek bends north
SE of 767, on east side
of 84° 10' vertical line.

Retrorsa at 765 USF, S.

Lebanon

2 1/2 mi SE of Washington
school road.

Retrorsa at 805 USF, S.

Lebanon

SE 3 1/2 mi to corner 890

Then E 1 mi to W branch
of Hall's creek.

retrorsa Leptana at 805

Dalmanella, Pl. ponderosa

Morrow

Horse feed ————— 35¢

Dinner myself &

driver at

St Charles Hotel — 1.00

Morrow.

1 1/2 mi N, then 1/2 mi W
+ 1/8 mi N to Hall's
Creek,

D. Smith's intersection at
about 810 NSGS.

At about 780, on W
side of bridge, in brown
Amherst, is strongly
rippled limestone
stone with ripple
marking about NNE.

Lebanon

4 mi SE to Washing-
ton school. Then 1/4 mi
SE to small branch
in bend of road.

Retrospect at 805 NSGS

Stubbs Mill

1 1/2 mi N, then 1 mi W
to road corner.

Retrospect at 820 NSGS.

Lebanon

2 mi S to corner 898, then
1 mi W + 1/8 mi NW to
house.

Retrospect, Lebanon,

Dalmanella at 830 NSGS

Lebanon

South of the sale at
south end edge of town.
Modular layer at top
of Amherst = 5 ft
below bend in road
where road along traction
line turns off NE
in approaching town.

South Lebanon S to
Hypokimville, Farm S edge
of house 1 1/2 mi E, at
road corner 817.

Top of Mt Amherst full of
Platystrophia praxiroa =
802. Above this, the
retrospect should be seen at
850 about. I doubt
whether this actually is
present in hill 1/2 mi E of 817.

Morrow

2 1/2 mi SW to Oak
Bridge school road,
Farm school 1/2 mi NW
then SW to second
creek crossing.

Retrospect, Lebanon, lying
Cylindrella at 860
NSGS, S of road crossing

From last locality
 2 mi West, about 1/4
 mi E of road corner
 826; on N side of road,
Platystrophia and
Cyclonema at 835.
Petrusa perhaps at
 860, as well as *Sem*
gularis.

Merwin,

4 mi S, straight line,
 to road corner 1/2 mi
 W of Rossburg, then
 3/4 mi SW to locality
 SE of 882, on stream,
Petrusa + *Leptodonta*
Dormarella at 848
 USGS.

Conings

1/40 mi SW, then 1/4 mi NW to
 creek. Then E up creek.

Petrusa, *Leptodonta*,
Cyclonema above
Platystrophia ponderosa
 11 ft above creek at road
 crossing. = 865 USGS.

Pleasant Plains

1/2 mi W along RR, then 1/3
 mi NW, 1/8 mi SW to
 cemetery, then W down
 stream.

Petrusa + *Leptodonta* at
 860 USGS about.

Newtownville

Henry Stralcher.

Trading house.

Newtownville station

7.52. 9.52. 12.52 West
 7.00 9.00 11.00 East

Edenton

On creek SE of town and
 NE of station.
 No exposure of any kind
 seen here.

Newtownville

W of town, at edge of town.
Petrusa at 880 USGS.

Monterey

SW of town to Patterson
 Run, then NW along
 creek road to road
 leading N to pike at
 point W of 887 corner.
Lynx top at 840 USGS.

Marathon

SE of town $\frac{1}{2}$ mi to
East Fork of Little Miami
River,

Where road turns SW
parallel to W bank of
river, lignite with
Cyrtomena is exposed
at about 870 U.S.G.S.,
but no fossils occur in
5 ft. locality belonging
to the retrograde horizon
although the lithology
of the rock is all right.

Decatur

5 mi S, toward Heitt,
at house on W side of
road, between letters R + D
in ROAD, 1 mi N of Heitt.
Strophomena concolor
& Streptelasma at 890
U.S.G.S.

Dinner at Heitt.

myself driven + horse-
feed. 1.50

Heitt store

N of Heitt.

Stroph. concolor 20 ft
above Leptaena at 840 U.S.G.S.

Heitt,

South 1 mi. where road
from SE. turns sharply
SW.

Strophomena concolor
+ Streptelasma
at 900 U.S.G.S. in road,
Possibly in place.

Decatur

St Cloud hotel #4. or

Decatur

E to Washburn creek.
Strophomena concolor
in creek on S side of bridge
at 796. From this Leptaena
layer is estimated at 773
U.S.G.S. about.

E to Ada Run

Strophomena concolor
in (not sure) = 55 ft
above creek at bridge.

$55 + 760 = 815$ for the

Strophomena

Leptaena at 755 U.S.G.S.

in the large dip slope just
above this level, run-
ning NE

E of Fairview $\frac{3}{4}$ mi
to Hills Creek.

Strophomena montana
+ Anomolodonta
casei, at level below
bridge = 765-770.

From this horizon is
calculated at 705-710.

East of Russellville
less than 1 mile,
to road corner
thence N to creek
Lynx dellus mouth
of south branch and
Leptaena + dentata
above mouth at

Russellville

1 mi N, $\frac{1}{2}$ mi E to
NW fork of Eagle, then
up stream short dis-
tance + up fork
eastward.

Leptaena, dentata
above Lynx, at
870 USGS.

Manchester,

Dayton road branching
off from Boutayville
road NW 1 mile.

Leptaena + dentata
at about 644 USGS.

with Strophomena
concreta further
up. Express etc — 29

Dayton to Xenia 34

Xenia to Wilmington 1.00

Dinner Wilmington .75

~~Express return~~

Borrowed letter
Wilmington to Hillsboro 1.11

My accounts 80

Hillsboro map map

Bainbridge Black shale

Hill bill

Carnal dinner 2.00

McCorkin

H A Pavey 5226 Hunter
Ave, Norwood Ohio
to Samuel Coyle

Carnuel

$\frac{1}{3}$ mi E to 2nd house
in N side of road, then
S into gully. Black
shale down to 920.
at first house W of
Heads Branch, on S side
of road. $\frac{2}{8}$ mi E of Carnuel
top of West Union at 900
Carnuel.
 $\frac{1}{10}$ mi W, then $\frac{1}{4}$ mi S,
then $\frac{1}{8}$ mi SW, at highest
land along road.
Black shale at 980.

$\frac{1}{8}$ mi farther SW, then
E up first road,
to abrupt turn in road.
Black shale at 1020.
From last locality $\frac{1}{4}$ mi
SW to Black shale at 990
and above.

Carnuel

$1\frac{1}{2}$ mi SW in straight
line to first road,
turning off directly W.
Black shale at 1000.
Lower part of last
exposure is greenish
like Clinton gray for 30 ft.

Washburn Hill

at road corner directly
W of line of Washburn Hill
Black slate at 1000
N of this road corner the
Clinton gray probably
cuts down to 980.
West of last locality
the Clinton gray into
clay goes down to first
creek = 980.
West of creek Clinton gray
shows up at 980
From corner 970 N toward
Franklin Branch the
Clinton gray shows up
down to 960.
Top of West Union at
945 just S of Franklin
Branch
South of road corner 970, $\frac{1}{3}$
mile, as far as next
road corner, Black shale
+ Clinton gray showing
frequently as far down
as 1020.
Road corner half way between
975 corner + State Hill
School. Top of West Union
at 1005.

Eliot Blackmelter
 Has left Vm of Illinois
 G one to private lease on ch
 Trench ofel gone to
 Anti crth again.
 Charles Stirling Adelaide
 South Branch of dead
 Strington

$\frac{1}{2}$ mi N, at road
 Cross by. H. Kalmers at
 1040. rock white limestone
 at base, which may be
 Mmure

Reeders School
 $\frac{1}{4}$ mi E at house
 Megalons at 1020.

Point

$\frac{1}{4}$ mi E, $\frac{1}{4}$ mi N to
 Rapids Forge, then E 1 mi
 to where lane turns off N,
 Beyond this $\frac{1}{10}$ mi E,
 Here base of Knox black
 shale of same is at 845
 and top of Mmure of same
 here is at 835.

Point

$\frac{7}{8}$ mi E, S of pike on S
 side of Point Creek.
 Mmure up to 850.

Caves

$\frac{1}{10}$ mi. E, along road
 going south
 West Mmure on Mmure
 at 860

Caves

$\frac{1}{8}$ mi W on highest land
 east of house on N side of
 road.

Black shale on Mmure at
 about 875

at next house West,
 $\frac{1}{3}$ mi W of Caves, Black
 shale rests on Hillston
 ss. on West Mmure on Mmure

Caves

$\frac{1}{3}$ mi West. West of first
 large gully W of the Caves,
 top of West Mmure at
 890 about.

Barrells Mill

$\frac{1}{2}$ mi NE, before reaching
 corner 935.

West Mmure as far up as
 890. Top of Mmure on.

Beaver Mill

1 mi E, W of Heads
 Branch.

West Mmure up to 860

Carmel

 $\frac{1}{3}$ mi N.

West Main up to 940

Barrett's Mill

 $\frac{3}{4}$ mi SE, $\frac{1}{8}$ mi NW
of Carmel 899.

Top of Monro at 880

Limestone Black

shale at 900.

Stultz Mill

Bridge SE of road corner 881
West Main into it why not
rivers. 855 about

W. road corner 881.

Black shale at 860

Further west, just
beyond house on N. side
of road. West Main
up to 865

Washburn school

E of = Monro up to
880,West of Washburn
school before reaching
creek crossing.

Monro up to 880

Road corner 949

at or near $\frac{1}{2}$ mi E of
Carmel.

Monro up to 910

Jannigan Park.

From road corner NW of
road Jannigan $\frac{1}{8}$ mi,
north to

Monro at 900 = top.

Black shale at 960 or 970
further south.

Jannigan Park

SW of road corner.

Here is white clay - clay
beneath Elm's Black
shale.Then NW to road corner
and South $\frac{1}{8}$ mile to
West Main up to 935.

Davidson school.

Immediately N of school
Hillston ss. in place
at 935. exact.Top of West Main =
about 10 feet above,
sandstone about 2 ft
thick.Further north - West
Main at 915 just
before Academy house.

Sinking Springs

1 mi N. then east from
near road corner 845, $\frac{1}{3}$ mi,
Murre up to 881.

$\frac{2}{3}$ mi E of Sinking
Springs ridge - Black
slate at 900.

Same road as above,
 $1\frac{1}{3}$ mi E of Sinking Springs
ridge.

Murre up to 830
with Black slate in the
10 feet above.

2 mi E of Sinking Springs
road, where creek road
turns up hill SE.

Murre up to 813.

Corner 741

$\frac{1}{8}$ mi NW. Murre = 790
at top.

East of corner 741

Top of Murre at 790 for
 $\frac{1}{2}$ miles. Then drops to
775 at gate of lane
on N side of road
at $\frac{3}{8}$ mi E of corner
741

From an school

Valley $\frac{1}{8}$ mi N.

Top of Murre at 785

East of Froman school
the top of the Murre
drops in $\frac{1}{8}$ mile to 760

$\frac{1}{8}$ mi N of corner 714
at junction with
ridge, highest Murre
is seen at 740.

Byington

opposite Stampish.

Murre up to 655

$3\frac{1}{4}$ mi E of Byington

Directly E of bridge

Murre up to 655

Pebbles - Bisher bed

Diaphanostoma wisconsinense

Camantocchia neglecta

Schuchertella prorsum

Schuchertella finchii (to piece)
deflected in median area

Camantocchia radzi

Spizifera wisconsin

Hemiphaedusa difflua (unclear)

Whitfieldella leading to
Cyrtoschisma

Dalmacites Americanus
Spinifer, with a radiating
 striae and simple fold
 & suture: a radiatus?
Cerithium, unimulch
 but no nodes in the
 unimulch.

Rhyndolthis americana
Lepidoceras thomasi
Dalmanella elegantula
Camarotoechia longiflora
 but not thick enough.
 Probably Port Williams
 specimen.

Whitfiddella cythiracea
 long + narrow typical
 like *D. emille* form.

960
 1270
 1230

Brassfield

Lepidoceras thomasi
 or this form

Plectambonites sericeus
Cyrtophyllym *L. arvola*
Dalmanella elegantula

Platystrophia 2 specimens
 in one.

Crinoids

At the locality *Brachy-*
gonia nodosa no occurs
 as types in the cherty
 Brassfield. The types
 were not obtained in
 the layers beneath the
 cherty zone.

Orchard

Dentalites

Chonetes novae scotiae

Lepidoceras thomasi

Stenobutella subplanica
Whitfiddella small.

Pterinea emarginata

Little mud flaps on
 irradiated oboles are
 numerous.

SW of Sinking Springs
W of Horned Lizard locality
Thin cherty layers

14 feet

Cuma

massive

15 ft interval

Biphenoid
limestone

5 ft indurated clay rock

46 1/2 interval approx.

bridge.

The richly fossiliferous
Bishop horizon occurs
between 5' to 6' ft above
base of Bishop section,
East of Horned Lizard locality.
65 ft Bishop from base
of Bishop to base of
crinoidal rock as
at nearly W of Pueblo.

12 ft massive crinoidal

limestone, going up

11 ft argillaceous lime-

stone, soft below

harder above. going up

20 ft interval with

ly jointed going up

7 1/2 ft marl. going up

cedar chapel N 3/4 mi. W. 2

W side of Middle Fork (21)

2 ft Bishopian section

11 ft interval

Level of base of road 905

1 ft whitish l. Pentamerus

Cyathophylloids

Hedysites, Leptodus

Stromatopora

24 ft massive Gilly? with

Bishop

14 ft whitish thin bedded

3.5 ft thin bedded Bishop

2 ft solid Bishop cherty

20 ft thin shaly Bishop

27 1/2 ft. East of church

road junction 799

SW of Sinking Springs

Small celled & smooth

Stromatopora

21 ft brecciated - marl

16 1/2 ft upper part more solid

11 ft massive rock

15 ft massive coarse grained

14 ft upper Bishop

5 1/2 ft cherty fossiliferous beds

13 1/2 ft massive Bishop

road above

2 1/2 ft. massive Bishop

5 1/2 ft. indurated clay rock

N of Crooked creek.

Sinking Springs road.

x 2 ft 10 in. aliferous limestone

3 ft massive limestone

4 ft clay shale.

15 ft. Massive limestone.

SW of Sinking Springs, at
Hornblow's locality.

Both bridge and base

of Bisher east of bridge

are 21 feet above

creek (= 725 ft above sea

level) = 746 ft for

bridge level.

8 ft 9.5 ft indurated clay layer = 762

Lingulelites = 27 feet

above bridge level 773

15 ft 15 ft

37 feet above bridge massive
limestone, white, with

Cladopora was base

of mud on

783

58 feet to top of massive

ledge.

804

64 feet = base of next

massive l. ledge

810

73 feet to top of this
massive l. which
may be base of marl.
819

78 ft. Base of marl cliff
much brecciated

824

96 ft to top of marl with

Halysites nexos

842

small called Favosites

Stromatopora.

First road N of East exposure

16 ft above bridge is

richly fossiliferous

cherty horizon.

Bridge = 758 + 16 = 774

for Lingulelites.

Base of Bisher over

indurated clay layer

at this road crossing

1/2 mi N of Hornblow's

locality =

755

Going E from bridge 758

the corner of mined rock

with Cladopora begins

at 784

This corner of mined

rock is exposed on

limb only as far as
as 792,

Interval without exp.
were up to 799

Bishop like rock
comes next.

At next level 807

There is a diposa & a
more coarse grained
layer.

At next level there is
a fine grained lime
stone like that in
which I found
Pentamerus else-
where. 810.

Next up to brecciated
rock. 822

White limestone, in
part dense, and in
part brecciated at 844

Highest exposure: 849
Top of land. 854

4/6
16.5

West of Porter's Mill.

Road corner 853 B. turn

Metagal axis 844

Massive { Top of bluff 837
Base of projecting ledge. 829
Cladipora cc. 819-823
Base of l. exposure 816
Bridge at Mill 801

East of Porter's Mill.

Opposite house 860

Base of limestone, rock. 843

Top of stromatopora rock. 838

Base of rock above face. 834

Top of falls 828

Base of massive l. 817 Cladipora

Base of l. exposure 811

Bainbridge Over

Quarry $3\frac{1}{4}$ mi S E of town
center.

Top

1160 Sunbury exposed 12 ft.

1148 Berea exposed 14 $\frac{1}{2}$ ft

1134 Bedford + unexposed 105 ft.

(10 ft clay at base of Bedford)

1030 Black shale calculated 290

Bainbridge 1 1/2 mi S.
Jester Hill section
Sunbury shale = 18 ft
thick.

Purplish clay shale
abundant from 1245
to 1220 and occurs
also, possibly by slipping
down to 1170. This is
the purple and light
green shale in the
Cromwell school area,

Above 1245 to 1300
is considerable thin
sandstone = Gray shaly

Waples Nipho

Greenfield 245 PM. Hills
7.38 AM local
9.38 East

Bainbridge
Morse W of RR station,
Morse along RR
N of river, above
black level.

Out crop in creek S of
Humboldt station
about 100 yds or
at least S of house on
E side with good
lane leading off
N of house eastward.

N of Humboldt about
a mile, Morse
in creek W of RR.

Fruitdale, then road
crossing,

Geesbrug. 1 mi E at
intersection on creek N of RR
Orinoides & Trilobites
Small called Favosites
Cladophora
Small ribbed Atrypa reticularis
Platystrophia with 2 lobes
sinus and 7 or 8 on each
side of sinus

Rhynchotrema like form
with 2 foliations only
in fold.

Leptaena

Spinel for Transverse oblique
Cornulites rapidly enlarging

Base of Lilly member.
 6 1/2 ft transition rock, indurated & clay layers in the bedded increasing to 12 ft up stream.
 Probably an unconformity.
 11 ft. shaly argillaceous rock, - upper Bisher? creek.

The Lilly member is massive here, cross-bedded and with clastic layers and all fossils found at the confluence of p. river.

New Vienna
 Snow Hill, N 1 mi.
 then NE 1/2 mi to
 Grassy quarry.
 Small celled Syngnathus
 as at Cedarville and
 Spring field
 Ceryx erinus, few
 strong nodes as at
 Spring field.
 Barrandella ventricosa
 The Stromatolites

with confluent
 cell septal stria
 and mammillate
 surface as in Irvine
 &c. formation.

Swisshelem Pebbles, O.

Muroc at Latham
 just below mouth of
 Grassy Fork, about
 2 feet above creek level.

West end 1 1/2 miles
 W of Pizgah church
 road.

Lynchburg
 13 1/2 ft shaly interval.
 within fossiliferous in
 massive limestone

West of Pizgah church
 W of Turkey creek fork,
 8 ft above base of B2 Pennsylvanian
 here, 1 specimen lower but
 no any in place.
 11 ft massive crinoid bed.
 → within fossiliferous is 890
 B 16 ft crinoid & Massif 1895
 10 ft interval Bisher
 creek 865

Hillston,

Wilmington road
 $\frac{1}{2}$ mi SE of Dennis Chapel
 Pentamerus in situ at
 1150. with crinoid
 granulate bituminous
 zone immediately beneath,
 Stromatopora with radi-
 ate branching stems
 in top of bituminous rock
 Also some Helicthis
 subtrilobatus, Stromatopora
 typoceras, small called
 Favosites, large crinoid
 stems, Ceratophylloids

Jerry Schuch.

$\frac{3}{4}$ mi SE is Pentamerus
 always at 1152

SE or E side of pike, is
 bituminous rock
 with Cladophora at
 toward base, in-
 cluding other flat ch-
 lites, Stromatopora
 small called Favosites
 Helicthis in testinates
 as at locality
 described above

This Arthur's flat ch-
 lites on road
 west of Pig gate
 church, 3 mi. N of
 Marshall 3 1/2 mi.

Further SE in field
 E of road several
 hundred yards, to
 Bishop, no fossils.
 $1\frac{2}{3}$ mi SE of Hillston.
 Spring SE, up pike,
 the very cherty top of
 Bishop occurs from
 1100 to 1120 about.

Hillston

$\frac{1}{4}$ mi from where
 Danville pike leaves
 turn, S of pike
 1120 = base of Pentamerus
 layer at base of Cedar
 hills

Berryville, straight east,
 $\frac{1}{2}$ mi E. Top of platy
 chert, at house N of road. =
 1000. N & S - and
 from this point refer-
 ences occur up to 1040.

This should carry the
section up into the
lower Cedarville
but none was identi-
fied with certainty.

W of Berryville the eleva-
tion reaches 1100 ft or
60 ft above the top of
the cherty Bisha.

$1\frac{1}{8}$ mi E of Berryville
the West Union Cr at
Archard contact is
at 930

$1\frac{1}{3}$ mi E of Berryville
on E side of same hill
as last locality.

The West Union - Cr at
Archard contact is
at 912

at $1\frac{3}{4}$ mi E of Berry-
ville the West
Union - Cr at Archard
contact is at 905

with the Cr at Archard
above clay at the
house at 960
for which O.C.M.

not accurate
Cladophora occurs
in the creek 2 miles
E of Berryville where
the valley heads in
from the south west.

Stromatopora fossils
are common 3 mi E
of Berryville, where
road starts off NE.

It is white, straight N
to creek, $\frac{1}{2}$ mi. to
Cr at Archard seen but
exposures in valley
are gravel.

House SE to where
main road turns
straight south. Here
lane leads off E to
at mid road house
on Middle Fork.

SE of house, in creek
the Bisha is under-
lain by limestone
at my work as 8 mi
S from Spring Springs at
825 about.

Mostly this house
the whole hill
side is full of
crinoidal or other
fossiliferous rock
regarded by me as
lilly for the pres-
ent.

Harriet. 2 miles to
964 corner. Then east

Loose Hillstron an

964-964 Stromatopora

964-958 crinoids.

958-952 1/2 hard l. m'ls

Holysites nexos & large
Stromatopora, in situ.

952 1/2 - 952 Bolide

l. with Stromatopora
& Pentamerus in situ

Loose, at 952

{ Stromatopora &
Pentamerus. Several

952-949 Rock similar
lithologically to

Pentamerus rock.

Lilly rock. 949-943 1/2

with Cladophora

weathered at base

to fossiliferous clay
Strophactonolis,
Gyalgia.

943 1/2 - 932 Sandy
shaly clay with
Cladophora &
Lophosira small & large
beaked

932-930 massive
granular limestone
with lenticular plates
& large smooth celled
Favosites & Stromatopora
same as on
hillside west of
house reached by
going from south
end of Harriet east
1 mile toward Middle
Branch.

930-925 not exposed

935 rock with large
globular Stromatopora
found in place.

925-905 Same coarse
grained Lilly rock
as above

Then on E. side of
the main hill

Cyathoph. r. r. r. & 2 dignified
5' ft. Silicified Stromatolites
very abundant here.

11 ft. arg. l. in the stream at spring
at top.

3 ft. hard Lilley limestone
10 ft. sandy clay clay.

16 ft. coarse grained l. with
many large Favosites etc.

11 ft. coarse grained l.
no large Favosites etc.

E of Hillsboro on
Lilley hill.

Top of road at Corp. line

5' 2 ft. lower Hillsboro ss.

4' 2 ft. not exposed

6' 2 ft. top of bituminous l.

16 1/2 Pentamerus in bitu-
minous limestone.

Green house = 4th house

E of Corporation line.

5 ft. Pentamerus l.
like that above

same as above

Plainview school, 5 mi
N of Hillsboro on Cuyahoga
pike

School house 1145

30 ft interval

2 ft bituminous l. coarse
grained

9 ft Pentamerus l. 1104

Sam Smith 1/2 mi W

to Dryden Sound Hill

Then 1/2 mi. and 1/2 mi. W

road to 5th house

House 1170

Interval 66 ft

Pentamerus layer.

Exposed at 1104

Lilley. bituminous, coarse

grained, crinoidal &

full of Cladophora. Also

one good little flatellid

Strong eastward dip

of Lilley changing

to nearly horizontal

just to eastward

Section down creek from

at road med. with the quarry

SW of Zink quarry, then down

Base of Lilley quarry.

64 ft interval.

2 ft. richly fossiliferous

10 feet basal Birken

My type locality for
Bisbee fossils runs
just before reaching
fence on going south.
Went down stream.
It is on E side of
hilltop.

Lilly Hill,
at highest level on road
Hillston ss. brown.
Interval 82 1/2 ft.
base of Cedarville bed
Lilly clay — 3 1/2 ft
Lilly l. — 12 1/2 ft.
Interval. 64 ft
Best fossil bed 2 ft
Base of Bisbee 10 ft.

174 1/2 ft = Crat
extended to Hillston ss.

92 ft = Crat bed down
to Cedarville.

Saylor collection at 050

Wilmington college
Dutchman's head cephalo-
lites, heads.

head 8 1/2 inches wide
and 3 3/8 inches long
from just above
up of Helvella inculpta
as shown by crinoid
stem of Dendrocrinus,
richardsoni.
Also large hypostome
of same, fine for
figuring.

PILLOWS

Crinoid eggs

New Indon 2 mi
W, a road turns off
N to Buford Cave.
SE of road corner,
on land of Ida
Brown, only a few
hundred feet SE
of road corner, is
the pillow structure
locality on south
side of East Branch
of Doe Run.

Spalding Springs
2 1/2 mi W of Springs
on D. J. Stanley farm,
W of house, 1/8 mi NW
along west side of
creek, in bluffs.

Thin grained Dev. ss.

Massive
12'

Favosites

Massive
12'

shale
spirifer

shale

6' massive

6' massive

5' massive 4 1/2 ss

1/4 mi S of section above
spirifer + Chonetes occur in
top of Dev. l. under the
Dev. ss.

Spalding Springs
1 mi due W, on
O'Keefe farm, SW
of house.

Spirifer common
within 20 ft of
base of Dev. ss.
in cross bedded
limestone.

The D J Stanley locality
lies 2 3/4 mi exact due
W of Spalding Springs.

The Shiel Dev coral
locality lies 1 1/4 mi
exact NW from the D J
Stanley locality.

The D O Latham coral
locality is 1 mi W of
Spalding Springs and
lies 2 3/4 due North.

This suggests a thinning
of the top of the
Devonian section in
a NW direction, with
strata being added
to the top.

17	16	15	14	13
				* Hays
20	21	22	23	24
* Shiel				
	28	27	26	25
	+ D Stanley		* O'Keefe	* Spalding

Shields $\frac{1}{4}$ mi east,
South of Blackley
house.

8 ft Devonian l. massive
Main Acervularia
horizon

17 ft Devonian l. massive
3 ft Favosites branching,
and other Der. l. fossils

5 ft. Devonian sandstone
Basal sandy lime-
stone with Devonian
Spinifer, branching
Favosites, Stylos etc.
(Fine grained Der. l.
No fossils found in it)

From the Shields Coral
locality go $\frac{3}{4}$ mi. E
to locality where so
at top of Kinnearick
is a bent. Last
year I found Recepta-
culites at top of
Kinnearick and
Devonian l. above.

Yeager farm. $5\frac{1}{2}$ mi SE of
New London, Upper Platten.

Petradimen large Conn's Ford
form. *Spirifer* *littoralis* x

Picardema (N of Spencer Creek) x

Guthrie *hickoria* x

Cyrtolites like small x

Subulites a *Prunipia* x

Zygospira small, recurvirostris x

Hemiphaedusa x

Canadella "fimbriata"? x

Plectambonites varians x

Fremontia of punctostriata var. x

Clathrospira x

gastropod with
flat side, conical

Liospira large Conn's Ford var. x

Stephen W Jones
 $1\frac{1}{2}$ NW of Frankford
on creek bed, goes to
a distance below
top of Platten

Phylloporina more
small form of *Clathrospira*

Frankford, Palno RR
level, E of 1 mi.

- x *Dalmanella (argata?)*
- x *Acrotichia* on *millus* 20 ft down
- x *Platystrophia* - shells and
- x *Strophomena incurvata*
- x *Plectambonites* cc. 12 ft down
- x *Rhynchotrema inebescens*
- x *Dinnithus macedsi*

at and above RR
level is *Receptaculites*
common.

Frankford, N 1 1/2 mi. then
E to school at exact
center of 26 (now a
farm house) and
then NE to hill
across small valley

Receptaculites cc
immediately above
horizon in which
Plectambonites and
Dalmanella argata
are very common

W.T. Jackson farm 2 1/2 mi
NE of Frankford W of Penno creek.

- Plectambonites* cc
- Dalmanella argata* cc
- Dinnithus macedsi*
- Proterometopus*
- Cerurus*
- Lichas cucullus*

Receptaculites, one found
but contain one just
above the horizon with
fossils listed above.

Henry Hamilton 3 1/2 mi
due N of Frankford

- Top of Bluff
- Strophomena incurvata*
- Cerurus hypostoma*
- Strophomena incurvata*
- Crinoids* on *Strophomena*

- Base of *Rimous richi*
- Dinnithus macedsi* x
- Dalmanella argata* 7
- Rhynchotrema inebescens*

W.H. Bingham, 3 mi S of
Frankford, up N fork
of Peno creek.

Spinifer or common
W of New London.

Thin grained blue
limestone of lower
Devonian, No fossils
5 ft sandstone in layers
1 to 2 inches thick, no
fossils

50 ft estimated thickness
of Cincinnati shale.
4 ft coarse grained l.
with *Sclerurus* with large
eyes and occipital
furrows between eyes
forming long curves.
Also what looked like
Heliobolus in form
but not certain.

T. of Richmond =
white limestone with
large *Gryph* and
major, *Macpura*,
but no *Receptaculites*
until further down
the section.

McCune, 1/3 mi West.

Gryph *ampla* large
Sclerurus

Spyroceras of *hammell* order
- *tillostrum* type

Strophomena fluctuosa?
Receptaculites

Sclerurus americanus

Burlington Green 2W and
and 3 mi N. = Green.

Rimmonick 1/4 mi NW of
house, in bed of stream.

Annie & Miller 3 mi
due S of McCune (1/4 mi
S of Church)

Sclerurus faulted
against each other Burlington

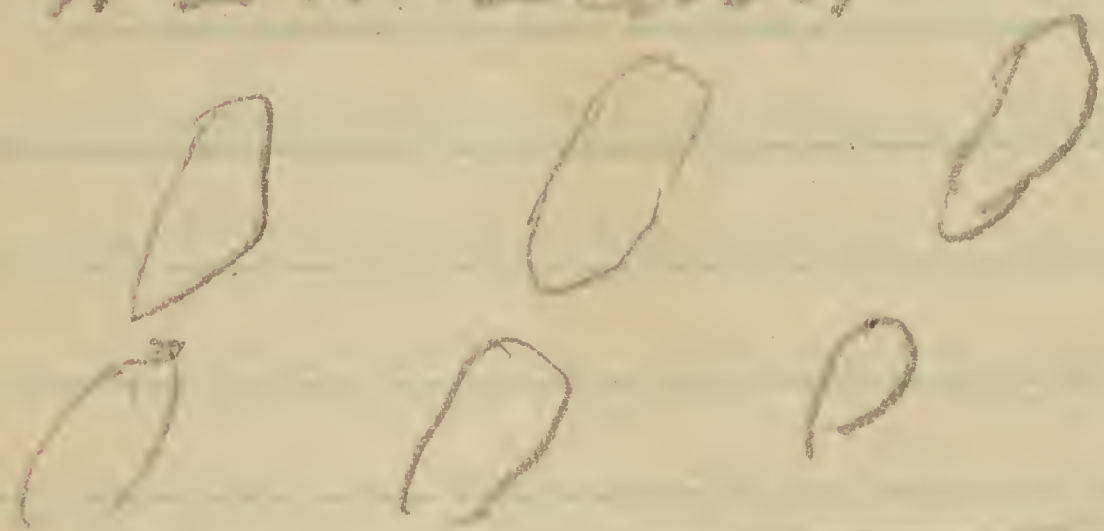
Coat from Taylor
Gryph *ampla*
which egg break by
I am grip in *Gryph*
at defect and go on
and stop at Burlington

2 mi NW New York
OSTRICH EGGS

at west end are crin-
 rippled limestone blocks
 with 5 elevations in length
 of 8 inches, at top of
 brecciated layer.

The ostrich eggs are
 above the brecciated layer
 in a much finer grained
 rock.

at this West end the
 fine grained rock is
 apparent to be folded over
 the eggs which run in
 a NE direction. The eggs
 are elongated in a
 NE direction.



This elongation
 takes place in a NE
 direction over at the
 east end of the
 exposure but here
 the eggs are closer

together.

The ostrich egg layer is
 $1\frac{1}{2}$ ft thick, includ-
 ing the highest part
 of the eggs.

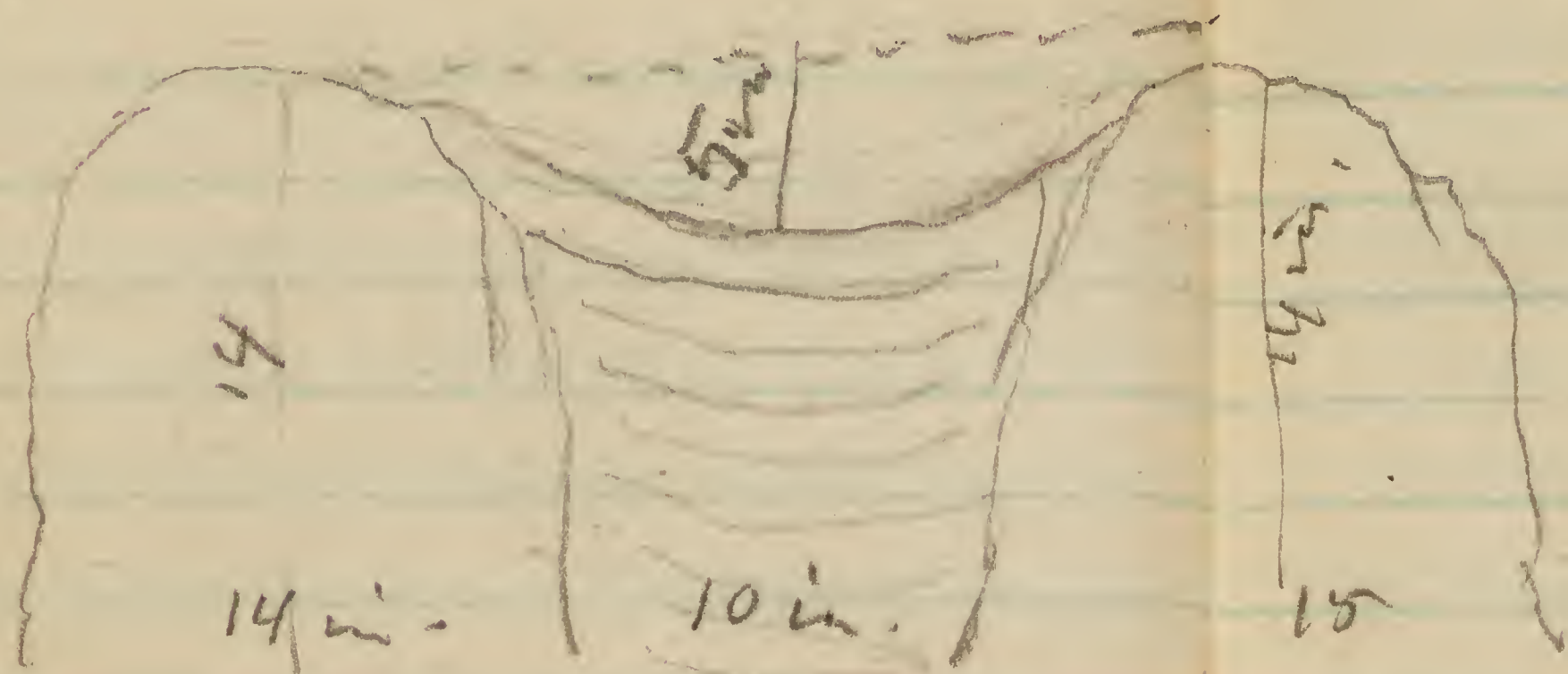
Numerous eggs from
 $1\frac{1}{2}$ where they are
 common to 2 ft occa-
 sionally in their
 shorter diameter.

Three are ft in diam.
 and less for the up
 less than $\frac{1}{3}$ of the
 total number.

Ratio of length to width
 = 2 to 3 for the more
 rounded ones to 1 to 2
 for more elongated
 ones.

Elevation of eggs from
 5 inches, to 12 and 14
 inches.

Ostrich eggs in
 Charles Brown farm
 E of house about 100 yds



Shows that eggs grew up
vertically, followed by
deposition of material.



Same as above.



Frankford 3 mi E to
Richmond known
with either *Strophomena*
Dinorthis subquadrata
Platystrophia? or
Rafinesquina.

1/6 mi east of crossroad

Sugar Creek
4 1/2 mi east of
Frankford
Strophomena
major, found
by Wayman

Receptaculites -
Tripteroceeras

Is any Clinton
in Pike Co?

What are
Wayman
subdivisions

Where can I
find good local-
ities for each.
Where is the
trilobite found,

West of Mats in a ~~W. area~~ ^{7.5} ~~17.18~~

Bowling Green 20 or 25 ft.

Cyrene Wabam
~~Wabam~~ x Cyrene *
 Noix x

Spring at Gravel's one
 Cyrene a Water No fossils
 Noix

Cyrene in Cal Wigginton
 place Schuchertella
 & almonella

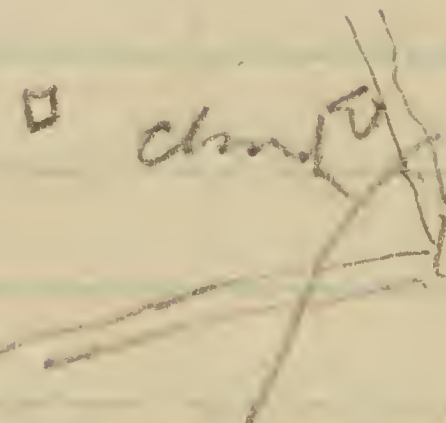
Mats in = Atypha

Edgerwood for plenty
 of fossils go down
 to John McCune's
 house and then toward
 right and down hill
 from barn, toward
 creek, go down to
 fork and go up on
 next fork. within
 $\frac{3}{4}$ mi of Edgerwood

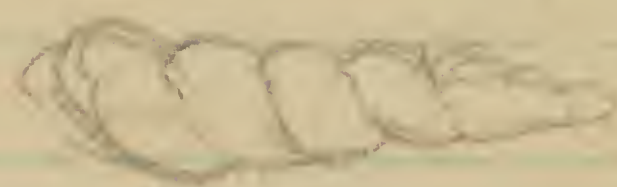
Cal Siddle

Rare trilobite in Burdman
 place near Calumet P.O.,
 in bed of branch at
 base of Magnolia

about 3 or 4 feet
 above base, Behind
 his apple orchard.



5 or 6 to house, then N
 of house, at foot of
 slope.



Auburn chert beds
 below Receipts white
 beds.

Dalmanella parvula
 Auburn is in Lincoln
 county.

Sulphur creek SE
 of Ashby.

Auburn is Tyler side
 of these limestone

54 B riding & see Freight
7.10 am 3.00 pm S with 6.00
12.15 N 9.00 pm North.

To Louisiana from B Co
9.10 am 1.40 pm 11.20 pm

Spring West
1.45 am 1.10 pm 5.50 pm

Auburn quarry. 1/4 mi
N of Auburn off Downing
Farm like of Auburn
Tringha type
* R. spines from rimmed
* Helicotoma
* Columnaria with red spots
* Strophomena incurvata
* Li. spines
* R. apertus
* Leperditia fabulites
* Bathyurus
* Narrow cylindrical
of vinted structure with
red ant septa, which
may be Beatrixia.

Eph Downing quarry
E side of State fair
ground N of toll gate
N of Auburn

55

Siler.

Burlington at quarry on
hill 1/4 mi SE of town on
E side of railroad, just beyond
creek. Two fossils lifted on
crest of stylolite.

Edgewood locality.

From Edgewood cross
track. N, just E of depot,
and follow road E to
John McCune house, on
N side of road, just before
reaching bend of road
toward SE. Along this
SE part of road is
exposed whitish lime-
stone supposed to be
Chouteau limestone
by me (mapped as Niagara)
where road goes E again
is greenish clay shale
containing Strophomena?
and regarded as Hamilton
shale (mapped as
Hudson river).

Fossils shipped parcel post
Louisiana May 22,
2 packages, trilobite

Cyrene

From S E corner of town
tata road north of east
Here Boulders is exposed
(Chert in town & Hammit
in of bed)

Pay R R R owley

1. ~~Lithology of Chert can~~
2. ~~Chert of Silex~~
3. ~~Good exposures near~~
~~Yppahua?~~
4. ~~Edgewood. My fossils~~
5. ~~Cyrene E. of road 1/4 mi~~
6. Good fossil locality
for Hudson river
7. Devonian limestone
in Pike Co, where?
8. Black slate. where?
9. Unborn
10. ~~Banking of river~~
11. ~~Dev. Boulders~~
12. ~~Yppahua at base~~
~~of Pennsylvania~~
12. St. balcytites

Hagan's Hacksmith shop,
Conch. to Spudding Springs

1 ft not exposed,
1 ft. Receptaculites.

(Dyschisma major medium size.
Madison large. Platystrophia oblonga)

2 1/2 ft Receptaculites.

Strophomena crumpled

1 1/2 ft Receptaculites in it.

Septacna gibbosa, 1 1/2 ft

1 1/2 ft white fine grained l.

Receptaculites.

Top of continuous section

2 1/2 ft sandy brecciated Dev. l.

[Stromatopora loose]

14 ft fine grained Dev limestone

5 ft clay shale. Hudson river

6 inches hard sandstone Dev

1/2 to probably clay shale.

1 ft. Rather coarse grained ss.

(white limestone pebbles)

1 ft sandstone with fine grained

R<

Small Dev. ss, thin
out ~~W~~ and the 42-2

Upper Devonian ss,
thickens ~~W~~, 4-20 ft
East edge section 19.

In ~~W~~ G. Scotland farm

3 ft Devonian blue dense l.

1 1/2 ft very irregularly bedded
Dev. limestone

1 1/2 ft clay shale. Dev.?

1 ft sandstone. Dev.

CH Lenox, near center of
section 19.

at foot of tree NE of house foundation
crossing, W of creek

Fossils. W of N + S road.
horizon collected in before.

is rich in force

West 1/4 mi. at house gate

distance 1/2 mile

Dev. Sandstone (20 ft thick)
exposed about as far N as ^{a. p.} meadow.

8 ft sandstone forming cliff.

2 ft dense limestone, brecciated
(irregularly bedded)

3 ft sandstone + shaly ss.

2 1/2 ft shaly sandstone

Brecciated l.

S of Lenox house

New London N across
Salt river, then N 2 miles
to where stream crosses
road in south edge of
section 13 on Huley

Hendersen farm

Top of Devonian l.

exposed W of bridge

Then go down E about

20 feet to exposure

in stream SW of

abe house,

and about on a level

with foot of tree NW of

foundation of house,

house now gone. In

this creek level is

abundant *Maurodon*

and some other

smaller fossils

and a few *Spodopora*

This locality is about

1/4 mi E down creek

Then go to foot of

tree mentioned above

Here is fossil *Maurodon*

again.

Then go down about

10 feet to just beyond

at W road crossing

Here *Favosites* is common. The branching form is only a variant of the more globular form. Even the latter is strongly nodose.

Then go down about 25 feet to point S of A. P. Maddox.

Here is base of brecciated Deb. l. A short distance further south ~~east~~ is top of Der. ss.

This ss. may be 24 feet thick and is exposed as far as point E. of C. H. Lantz house.

Below this is at least 4 feet of limestone also regarded as Devonian, since it is brecciated, but it might be Ordovician. See page 58 for additional notes on basal portion.

Hurley Henderson farm above Der. l. and under a fine grained sandstone phase is about 6 inches of material, near middle of which is 1 in. layer of thin shaly coal.

Broad Cove

Protogena bipunctata
Ceramus m. sp.

Schizocrania

Plectambonites sericeus
Orthis bicarinata

Shield

Spalding Spgs. 1 mi N + 4 1/2 miles W along straight line to a ceratonic bed 1/4 mi E of Shields.

DO Lath on Acervularia
Spalding Spgs. 2 1/2 mi and 1 mi W to locality

Spalding Spgs
New London 2 mi N then 6 1/2 mi W on straight line W.

62

Abe McFarland &
Hurley Henderson

Under Pima shale
New London NE to
crossing over S act
river, W of RR, then
angling NE to Salt
River Sm'th Sta-
tion, then E $1\frac{1}{2}$ mi,
S by 2000 mill.

or

New London $2\frac{1}{2}$ mi
straight N, then
2 mi straight E in
eastern half of 29,
somewhere.

Very brecciated
white Devonian
lenses at the thin
Hudson river shale
southward,
somewhere near
Wm. B. or Es
place

Judge Spalding
Dr. Gallagher
orally St Peter

63

Shepard US Survey
Underground
Water of Mr.
Refers to it as
St Peter's.

Truck up Smallm.

64

65

72

E 1959 Mary



GENUINE LEATHER

1262

